

# P1 Panelboards

[usa.siemens.com/panelboards](http://usa.siemens.com/panelboards)



## Product Description

The current generation of panelboards from Siemens offers the high level of engineering and innovation you've come to expect from the leader in power distribution technology. The "P Series" line of panelboards offers a stepped approach to power distribution. (P1-P2-P3-P4-P5)

The line is anchored by the innovative P1, featuring the industry's most flexible designs. The P1 series virtually eliminates common errors, such as feed direction, and main lug versus main breaker. Increasing distribution is simplified by the ability to add feed-thru lugs or Subfeed Breakers in the field.

### **P1 construction includes the following:**

- **250A max. bus** in CU or AL tin plated w/18-66 1-pole circuits
- **400A max. bus** in CU or AL tin plated w/30-66 1-pole circuits

\* Interiors with BL/BQD branch unit space are available in both Feed-thru and Non-Feed-thru variations. (FT panel # ends with "T", NFT panel # ends with "N")

\*\* Interiors with xGB/3VA41 branch unit space are only available in Feed-thru variations and 3-phase only.

\*\*\* Non-Feed-thru interiors do not include the Sub-Feed Space, but allows for 6" of additional unit space in the same size enclosure.

### **Standards & Certifications:**

- NEC: 2020 (where accepted), NEMA PB 1 and ANSI/NEMA PB1.1
- UL Listed: 67, 50 and 50E. (see "Panelboards" File #E2269, and #E4016) Also meets Federal Specification W-P-115c.
- NFPA 70 compliant (Enclosures are not fire rated).
- Seismically qualified and OSHPD rated (OSP #0078)- see also LVTM-LVSEI-xxxx Seismic Flier

## Features Overview

### **The P1 Series lighting panel features include:**

- 1) Fas-Latch trim (Type 1), is standard but, P1 can be ordered with other popular front styles.
- 2) Adjustable Interiors with jacking screw system.
- 3) The split neutral with connections on both sides of the panel.
- 4) Interior is invertible in the field and convertible from Main Breaker to Main Lug (also ML to MB) with field installable kits.
- 5) Feed-Thru panels can add Feed-thru Lugs, subfeed breakers or bus mounted Surge Protection with no box size change.

### **P1 construction features:**

- Either 250A or 400A max. main bus, only Temp Rated Tin plated aluminum bus or tin plated copper bus are available.
- Up to 600 volts AC with standard Bus bracing up to 200KAIC

### **Main space:**

- 250A max. bus allows for any MLO or MB kit up to 250A max. to be installed or changed in the field as needed.
- 400A max. bus allow for any 400A MLO or MB kit to be installed or changed in the field as needed.

### **Unit space:**

- BL/BQD Unit Space Panels only accept BL, BT or BQD frame breakers up to 100A max. (includes AFCI/GFCI series and BSPD surge)
- xGB/3VA41 Unit Space Panels only accept xGB or 3VA41 frame breakers up to 125A max. (Limited to 100A in the 250A 18 Circuit Panel only) (BSPD bolt on SPD also available)

### **Subfeed space: (available only with Feed-thru interiors)**

- a) Feed-Thru Lugs either 250A max or 400A max are available
- b) Subfeed Breakers can be added using any of the 250A max. Main Strap kits for both 250A or 400A Panels.
- c) Surge Protection Devices: Bus Mounted SPD can be added as Factory Assembled or in the field. (TPS3 02/L2 or TPS4 01/L1 series)

### **Additional information:**

For complete application and pricing information contact your local sales office.

For further information on the product, visit our website at [www.usa.siemens.com/panelboards](http://www.usa.siemens.com/panelboards).

For detailed configuration information consult the SpeedFax section 11 on the website.

## P1 Panelboard additional information

### **Enclosures available:**

- Std. Enclosure sizes: 20" wide x 5.75" Deep
- Std. heights: 26", 32", 38", 44", 50", 56", 62", 68" and 74". Also available B74FLR universal fit Type 1 Enclosure fits all P1/P2 interiors 26" thru 74".
- Std. Types Available: Type 1, Type 3R, Type 3R/12, or Type 4X

### **Type 1 Fronts — Surface or Flush available:**

Order to match box height: Typical 20" wide w/ #14 Gauge Steel

- FasLatch Front (Surface or Flush) is Standard, options available: Screw-to-Box, Hinge-to-Box and Door-in-Door fronts with either standard hinge or Piano Hinge options (including 304 Stainless).

### **Weight = Approximate 3 lbs. per inch of box height**

- Total panelboard weight when filled with a normal quantity of breakers and accessories is an estimate only.

### **Series Connected Short Circuit Ratings**

The term "Series Connected Short Circuit Rating" refers to the application of series connected circuit breakers in a combination that allows some breakers to have lower individual interrupting ratings than the available fault current.

This is permitted as long as the series combination has been tested and certified by UL. See Circuit Breaker Section of the SpeedFax.

- Series rating booklet # PBTA-00101B-1020 (web searchable)

Catalog Numbering System: Factory Assembled →				P	1	C	4	2	M	L	2	5	0	A	T	S	N
Type of Panel:				P	1												
Voltage and System Code:				A, C/X, D, E/8													
"X" and "8" are for P1 UPB only interiors				F, J, I, T													
(UPB max. circuits = 54) Circuits:				18, 30, 42, 54, 66													
(See Speedfax for MB Codes) Main:				ML = Main Lug,													
MC (Main Convertible for UPB only)				"xx" = Main Breaker													
(UPB : only 250A or 400A max.) Amperage:				100-400A													
(only Tin Plated CU or AL Bus) Bus Code:				(material/plating) A or C only													
Feed Location:				T = Top B = Bottom													
Mounting:				S = Surface F = Flush													
Subfeed Space Indicator (RP1 only)				Factory assembled: T or N = No Subfeed Space													
UPB Catalog number - only 12 characters →				P	1	X	4	2	M	C	2	5	0	A	T	N/A	
Subfeed Space Indicator (for RP1 only)				UPB: always = T = Subfeed Space Included											T		

Voltage codes	
A	120/240 1Ø 3 W AC
C or X	208Y/120 3Ø 4 W Yoke AC - X is for P1 UPB only
D	240 3Ø 3 W Delta AC
8	480Y/277 3Ø 4 W Yoke - P1 w/GB/3VA41 Branch Only
E	480Y/277 3Ø 4 W Yoke AC
F	480 3Ø 3 W Delta AC
J	240 1Ø 2W No Neutral AC
I	347 3Ø 3W Delta AC
T	230 3Ø 3W Delta AC
Note:	UPB Interiors available only in codes: A, E, X and 8

## Branch Circuit Breakers (also see Bolt on SPD series BSPD in this flier # RPFL-BSPD1-0120)

Revised P1 Branch Circuit Breakers <sup>①</sup>				1-Pole				2-Pole and 3-Pole									
				Max IR (kA) at				Amp Ratings Available				Max IR (kA) at				Amp Ratings Available	
Amp Rating	Trip Type	Breaker Family	Breaker Type	120V	277V	347V	125V DC <sup>③</sup>	120/240V	240V	480Y/277V	480V	600Y/347V	600V	125/250V DC <sup>③</sup>	250V DC <sup>③</sup>		
100	Thermal Magnetic	BL	BL, BT <sup>②</sup>	10	—	—	—	15-70 <sup>②</sup>	10	10	—	—	—	—	—	15-100 <sup>④</sup>	
			BLH, BTH <sup>②</sup>	22	—	—	—	15-70 <sup>②</sup>	22	22	—	—	—	—	—	15-100 <sup>④</sup>	
			HBL	65	—	—	—	15-50	65	65	—	—	—	—	—	15-100	
	Special <sup>②</sup> Application	BLG BL	BLG <sup>②</sup>	10	—	—	—	15-20	10	-	—	—	—	—	—	30	
			BL(HID) <sup>②</sup>	10	—	—	—	15-30	10	-	—	—	—	—	—	15-30	
	Thermal Magnetic	BQD BQD (CSA)	BQD <sup>②</sup>	65	14	—	13	15-100	—	65	14	—	—	—	13	—	15-100
			BQD6 <sup>②</sup>	65	—	—	13	15-70	—	65	—	—	10	—	13	—	15-70
XX	Electronic and misc.	BL	AFCI/GFCI & Dual Function	X	—	—	—	see special table page SF 11-17	x	—	—	—	—	—	—	see special table page SF 11-17	
125	Thermal Magnetic	GB <sup>②</sup>	NGB	100	25	14	13	15-125	—	100	25	—	14	—	13	—	15-125
			HGB	100	35	14	13	15-125	—	100	35	—	14	—	13	—	15-125
			LGB	100	65	14	13	15-125	—	100	65	—	14	—	13	—	15-125
		3VA41 <sup>③</sup>	SEAB	65	25	14	13	15-125	65	65	25	25	14	—	53	53	15-125
			MEAB	85	35	18	23	15-125	85	85	35	35	18	—	83	83	15-125
			HEAB	150	65	25	33	15-125	150	150	65	65	25	—	103	103	15-125

<sup>①</sup> Unit space is 1 inch per pole, except for Special Application with accessory included.

- No branch kits available, unit space for all branch positions is twin mount.

- Branch space is either for BL/BQD only (or) for xGB/3VA41 only.

<sup>②</sup> BLG: Two-pole breaker is one phase and neutral. Three pole is two phases and neutral

- See SpeedFax Page 7-31 for additional info. Some are Built to order. Allow 2-3 weeks delivery.

<sup>③</sup> DC Voltage Systems are not approved for use in P1 panels. Refer to P2/P3 panels if DC Voltage Systems are needed.<sup>④</sup> 110A-125A BL/BLH (2-pole only) available as Main or Subfeed only in Revised P1 panels.

⑤ Approved for CSA and UL Listed.

⑥ Approved for CSA but not UL Listed.

⑦ BT and BTH are only available in 15A and 20A with two 1-pole circuits in one inch of unit space.

⑧ The Revised P1 (18 circuit 250A only) is limited to 100A per connection (200A per pair) when installing xGB Branch Breakers across from one another. 3VA41 does not have this restriction. All other configurations allow 125A per connection max. (250A per pair max.)

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## Primary Main Breaker Selections available for P1 Panels

Note: all 250A frame and smaller are suitable for Subfeed single mount

P1 Main Circuit Breakers & Subfeed				2-Pole and 3-Pole						Main Strap Kits <sup>③</sup> (Subfeed up to 250A max.)
				Max IR (kA) at <sup>①</sup>						
Amp Rating	Breaker Family	Main Breaker Code	Breaker Type	240V	480Y/277V	480V <sup>②</sup>	600Y/347V	600V <sup>②</sup>	Amp Ratings Available	
100	BL	BL	BL	10	—	—	—	—	15-100	MBKVA41A for 1-phase MBKVA41B for 3-phase
		BH	BLH	22	—	—	—	—	15-100	
		HB	HBL	65	—	—	—	—	15-100	
	BQD	BQ	BQD <sup>②</sup>	65	14	—	10	—	15-100	
125	Sentron GB	NB	NGB	100	25	—	14	—	15-125	MBKVA41A for 1-phase MBKVA41B for 3-phase
		G2	HGB	100	35	—	14	—	15-125	
		G3	LGB	100	65	—	14	—	15-125	
	3VA41	V1	SEAB	65	—	25	14	—	15-125	
		V2	MEAB	85	—	35	18	—	15-125	
		V3	HEAB	100	—	65	25	—	15-125	
225	Sentron QR	QR	QR2	10	—	—	—	—	100-225	MBKQR1A for 1-ph MBKQR3A for 3-ph
		Q4	QRH2	25	—	—	—	—	100-225	
		Q5	HQR2	65	—	—	—	—	100-225	
		Q6	HQRH2	100	—	—	—	—	100-225	
250 [150]	3VA52 (W/TM230 trip)	VA	MFAS	85	—	35	—	18	100-250	MBKVA5262A for 1-phase MBKVA5262B for 3-phase
		VB	HFAS	100	—	65	—	25	100-250	
		VC	CFAS	200	—	100	—	35	100-250	
	3VA62 [3VA61] (ETU350 LSI standard)	WA [W2]	MFAE [MDAE]	100	—	35	—	18	100-250 [40-150]	
		WB [W3]	HFAE [HDAE]	100	—	65	—	22	100-250 [40-150]	
		WC [W4]	CFAE [CDAE]	200	—	100	—	35	100-250 [40-150]	
		WD [W5]	LFAE [LDAE]	200	—	150	—	50	100-250 [40-150]	
400	3VA53 (W/TM230 trip)	VE	MJAS	85	—	35	—	18	200-400	MBKVA5363A for both 1-phase & 3-phase
		VF	HJAS	100	—	65	—	25	200-400	
		VG	CJAS	200	—	100	—	35	300-400	
	3VA63 (ETU350 LSI standard)	WE	MJAE	100	—	35	—	18	100-400	
		WF	HJAE	100	—	65	—	22	100-400	
		WG	CJAE	200	—	100	—	35	100-400	
		WH	LJAE	200	—	150	—	50	100-400	

<sup>①</sup> DC System Voltages are not available for RP1 series.<sup>②</sup> Approved for CSA and UL Listed.<sup>③</sup> For Revised P1 Panels only. Not applicable for "original" P1 panels.<sup>④</sup> 480V values apply to 480Y/277V also.<sup>⑤</sup> 600V values apply to 600Y/347V also.**SIEMENS**

## Standard Enclosures

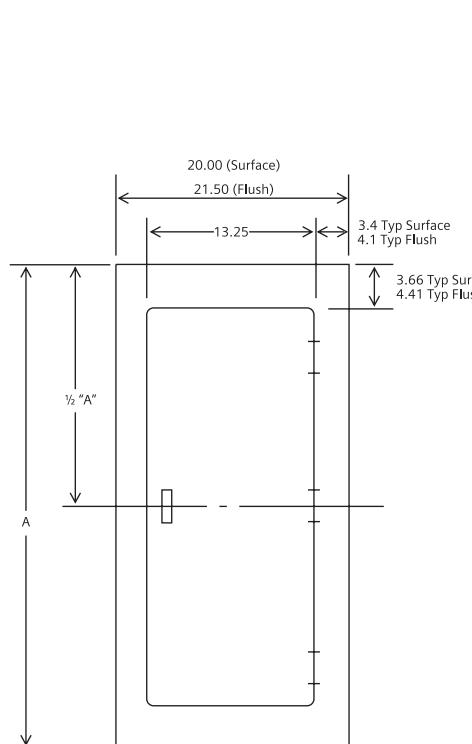
Box Height (in.)	Catalog Number				
	Type 1 Standard Trim			Type 3R <sup>③</sup>	
	Box <sup>①</sup>	Surface <sup>②</sup>	Flush <sup>②</sup>		
26	B26	S26B	F26B	NR26	WP26
32	B32	S32B	F32B	NR32	WP32
38	B38	S38B	F38B	NR38	WP38
44	B44	S44B	F44B	NR44	WP44
50	B50	S50B	F50B	NR50	WP50
56	B56	S56B	F56B	NR56	WP56
62	B62	S62B	F62B	NR62	WP62
68	B68	S68B	F68B	NR68	WP68
74	B74	S74B	F74B	NR74	WP74

① 14 Gauge Steel only.  
② 16 Gauge Can w/ 14 Gauge Front.

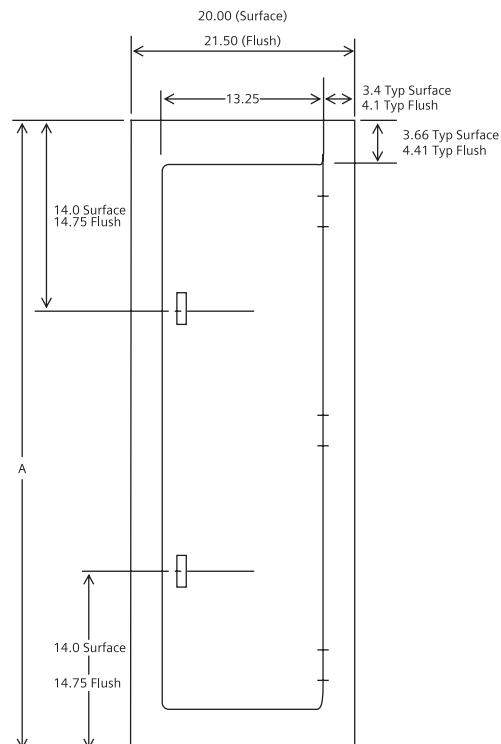
## Lug Kits — Main or Feed Thru

Amp Rating	Mat.	Wire Range (Includes Neutral)	Service	Revised P1 Catalog No. <sup>④</sup>
250	AL	(1) #6 AWG-350 kcmil (CU or AL)	1 Phase	MLKA1A
		(1) #6 AWG-350 kcmil (CU) cable only	3 Phase	MLKA3A
	CU	(1) #6 AWG-350 kcmil (CU) cable only	1 Phase	MLKC1A
		(1) #6 AWG-350 kcmil (CU) cable only	3 Phase	MLKC3A
400	AL	(2) 1/0 - 250 kcmil or (1) #2 AWG-600 kcmil	1 Phase	4MLKA1A
		(1) 1/0 - 600 kcmil CU cable only	3 Phase	4MLKA3A
	CU	(1) 1/0 - 600 kcmil CU cable only	1 Phase	4MLKC1A
		(1) 1/0 - 600 kcmil CU wire [max.(1) 600 kcmil CU wire]	3 Phase	4MLKC3A
400	AL	(1) AL 1/0-750 kcmil (2) AL/CU 250kcmil max. [max.(1) 600 kcmil CU wire]	1 Phase	4MLKA1B
		(1) AL 1/0-750 kcmil (2) AL/CU 250kcmil max. [max.(1) 600 kcmil CU wire]	3 Phase	4MLKA3B

④ Revised P1 kits cannot be used with original P1.



Box Size	Surface A	Flush A	# of Hinges
26	26	27.5	2
32	32	33.5	2
38	38	39.5	2
44	44	45.5	3
50	50	51.5	3

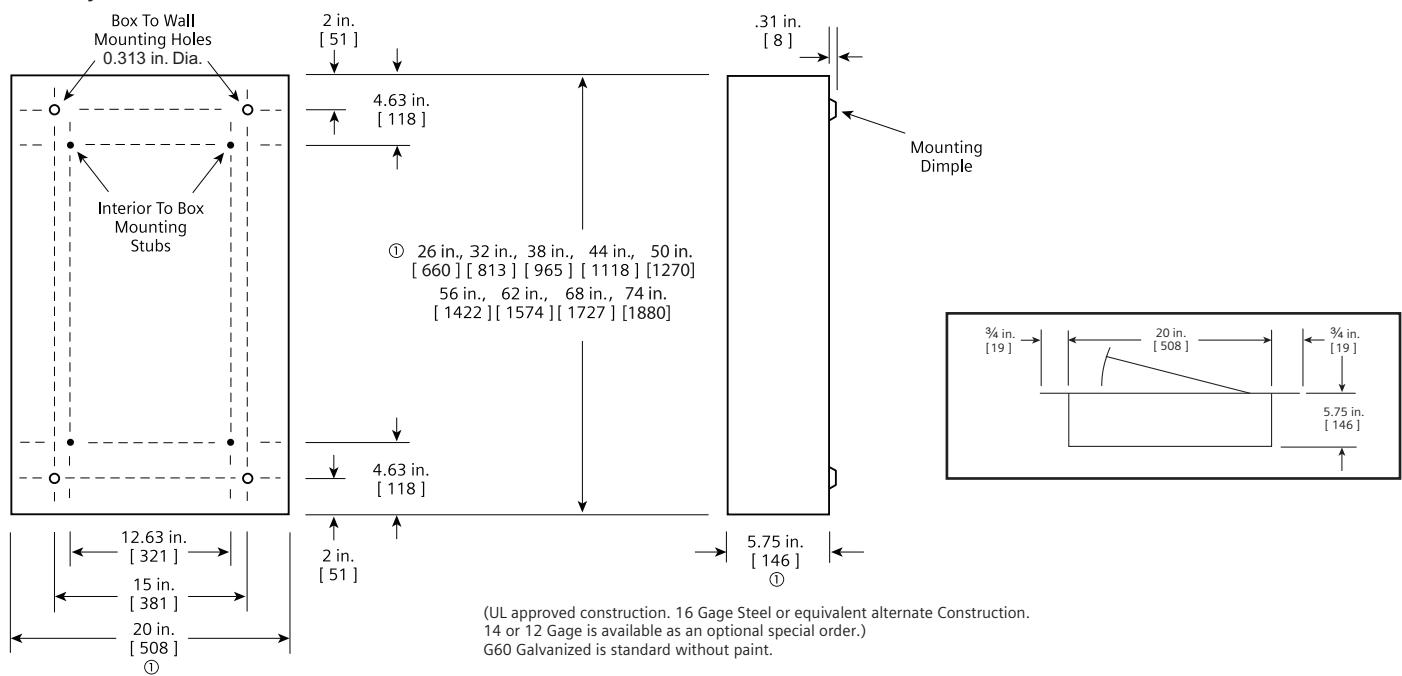


Box Size	Surface A	Flush A	# of Hinges
56	56	57.5	3
62	62	63.5	3
68	68	69.5	3
74	74	75.5	3

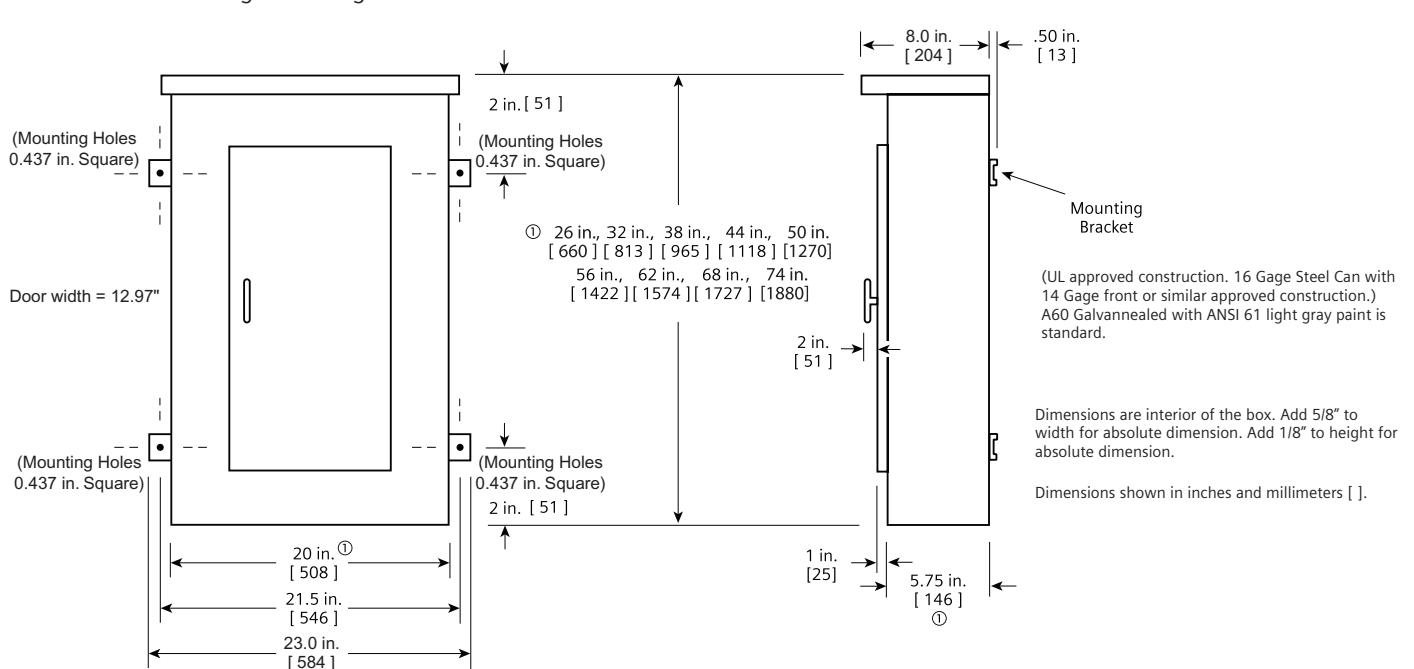
**SIEMENS**

**Type 1 Box**

Box is symmetrical

**Type 3R and 3R/12 Box**

Note: 3R boxes 50" High and Larger include two "T" handles.



**Legal Manufacturer**

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The Siemens logo, featuring the word "SIEMENS" in a bold, sans-serif font. The letters "SIEMENS" are colored in a teal or blue-green hue.